36- Concerning the blood-gas barrier in the normal lung:

- A. Fluid can drain through the interstitium of the thick side of the blood-gas barrier.
- **B.** The alveolar epithelium has a high permeability for water.
- C. The strength of the barrier on the thin side is mainly attributable to the endothelial cells.
- **D.** No protein normally crosses the capillary endothelium.
- E. Water is actively transported into the alveolar spaces by alveolar epithelial cells.

37- Which of the following statements is true regarding the earliest stages of pulmonary edema?

- A. Fluid tracks through the interstitium of the thin side of the blood- gas barrier to the perivascular and peribronchial spaces.
- **B.** There is no increase in lung lymph flow.
- C. Fluid floods the alveoli one by one.
- **D.** The hydrostatic pressure in the interstitium probably falls.
- E. Cuffs of fluid collect around the small arteries and veins.

38- Interstitial pulmonary edema (in the absence of alveolar edema) typically results in:

- A. Septal lines on the chest radiograph.
- B. Increased lung compliance.
- C. Reduced lymph flow from the lungs.
- D. Severe hypoxemia.
- E. Fluffy shadowing on the chest radiograph.

39- Concerning severe pulmonary edema with alveolar filling:

- A. Lung compliance is increased.
- **B.** Airway resistance is not affected.
- C. The arterial hypoxemia cannot be abolished by breathing 100% oxygen.
- **D.** Respiration is deep and labored.
- E. The alveolar edema causes chest pain.

40- Moderately large pulmonary emboli often cause:

- A. CO2 retention.
- B. Increased physiologic dead space.
- C. Pulmonary hypotension.
- D. Rhonchi.
- E. Increased cardiac output.

41- A 41-year-old man presents with a sudden onset of severe dyspnea accompanied by pleuritic left-sided chest pain that began several hours after a transoceanic flight. There is no fever, cough, or hemoptysis. On examination, he has clear breath sounds on auscultation and a normal cardiac examination but leg edema that is greater on the right than the left. Which is the most appropriate initial diagnostic test?

- A. Bronchoscopy
- B. CT of the chest with contrast
- C. Echocardiogram
- D. Pulmonary angiography
- E. Spirometry